

US Steel-Gary Works  
 Gary, Indiana  
 Permit Reviewer: Gail McGarity

T089-7663-00121

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT  
 OFFICE OF AIR QUALITY  
 COMPLIANCE DATA SECTION**

**PART 70 OPERATING PERMIT  
 QUARTERLY DEVIATION AND COMPLIANCE MONITORING REPORT**

Source Name: U.S. Steel – Gary Works  
 Source Address: One North Broadway, Gary, Indiana 46402  
 Mailing Address: One North Broadway, Gary, Indiana 46402  
 Part 70 Permit No.: T089-7663-00121

**Months:** August 18 to September 30    **Year:** 2006

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| This report shall be submitted quarterly based on a calendar year. Any deviation from the requirements, the date(s) of each deviation, the probable cause of the deviation, and the response steps taken must be reported. A deviation required to be reported pursuant to an applicable requirement that exists independent of the permit, shall be reported according to the schedule stated in the applicable requirement and does not need to be included in this report. Additional pages may be attached if necessary. If no deviations occurred, please specify in the box marked "No deviations occurred this reporting period". |   |
| <input type="checkbox"/> NO DEVIATIONS OCCURRED THIS REPORTING PERIOD.   |   |
| <input checked="" type="checkbox"/> THE FOLLOWING DEVIATIONS OCCURRED THIS REPORTING PERIOD.   |   |
| <b>Permit Requirement (specify permit condition #)</b> C.5(a)(12)  |   |
| <b>Date of Deviation:</b> 09/26/06   | <b>Duration of Deviation:</b> 3 minutes/deviation |
| <b>Number of Deviations:</b> 9   |   |
| <b>Probable Cause of Deviation:</b> Numerous leaks in the furnace uptakes and the bell seating surfaces are worn to the point that particulate can escape to the atmosphere under pressure.  |   |
| <b>Response Steps Taken:</b> Remove all coal injection for the furnace and shutdown No. 4 Blast Furnace for top repairs.   |   |
| <b>Permit Requirement (specify permit condition #)</b> C.5(a)(12)  |   |
| <b>Date of Deviation:</b> 09/29/06   | <b>Duration of Deviation:</b> 3 minutes           |
| <b>Number of Deviations:</b> 1   |   |
| <b>Probable Cause of Deviation:</b> The No. 6 Blast Furnace top and bell seating surface areas are worn. Seating surfaces are scheduled to be replaced.  |   |
| <b>Response Steps Taken:</b> Reduce the PCI coal injection rate to the minimum sustainable rate and make appropriate burden changes. Monitor furnace top relief valve emissions and make move to zero coal injection.  |   |

**SECTION C****SOURCE OPERATION CONDITIONS**

|               |
|---------------|
| Entire Source |
|---------------|

**Emission Limitations and Standards [326 IAC 2-7-5(1)]****C.1 Opacity [326 IAC 5-1]**

Pursuant to 326 IAC 5-1-2 (Opacity Limitations), except as provided in 326 IAC 5-1-3 (Temporary Alternative Opacity Limitations), opacity shall meet the following, unless otherwise stated in this permit:

- (a) Opacity shall not exceed an average of twenty percent (20%) in any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.
- (b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minutes (sixty (60) readings as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor) in a six (6) hour period.

**C.2 Open Burning [326 IAC 4-1] [IC 13-17-9]**

The Permittee shall not open burn any material except as provided in 326 IAC 4-1-3, 326 IAC 4-1-4 or 326 IAC 4-1-6. The previous sentence notwithstanding, the Permittee may open burn in accordance with an open burning approval issued by the Commissioner under 326 IAC 4-1-4.1.

**C.3 Incineration [326 IAC 4-2] [326 IAC 9-1-2]**

The Permittee shall not operate an incinerator or incinerate any waste or refuse except as provided in 326 IAC 4-2 and 326 IAC 9-1-2.

**C.4 Fugitive Dust Emissions [326 IAC 6-4]**

The Permittee shall not allow fugitive dust to escape beyond the property line or boundaries of the property, right-of-way, or easement on which the source is located, in a manner that would violate 326 IAC 6-4 (Fugitive Dust Emissions).

**C.5 Fugitive Dust Emissions [326 IAC 6.8-10 and 326 IAC 6.8-11]**

- (a) Pursuant to 326 IAC 6.8-10-3 (Lake County Fugitive Particulate Matter Control Requirements), the particulate matter emissions from source wide activities shall meet the following requirements:
  - (1) The average instantaneous opacity of fugitive particulate emissions from a paved road shall not exceed ten percent (10%).
  - (2) The average instantaneous opacity of fugitive particulate emissions from an unpaved road shall not exceed ten percent (10%).
  - (3) The average instantaneous opacity of fugitive particulate emissions from batch transfer shall not exceed ten percent (10%). Where adequate wetting of the material for fugitive particulate emissions control is prohibitive to further processing or reuse of the material, the opacity shall not exceed ten percent (10%) three (3) minute average. This includes material transfer to initial hopper of material processing facility as defined in 326 IAC 6.8-10-2 or material transfer for transportation within or outside the source property including but not limited to the following:
    - (A) Transfer of slag product for use in asphalt plant
      - (i) From a storage pile to a front end loader; and
      - (ii) From a front end loader to a truck.
    - (B) Transfer of sinter blend for use at the sinter plant:

- (i) From a storage pile to a front end loader; and
- (ii) From a front end loader to a truck; and
- (iii) From a truck to the initial processing point
- (C) Transfer of coal for use at a coal processing line:
  - (i) From a storage pile to a front end loader, and
  - (ii) From a front end loader to the initial hopper of a coal processing line.

Compliance with any operation lasting less than three (3) minutes shall be determined as an average of consecutive operations recorded at fifteen (15) second intervals for the duration of the operation.

- (4) Slag and kish handling activities at integrated iron and steel plants shall comply with the following particulate emissions limits:
  - (A) The opacity of fugitive particulate emissions from transfer from pots and trucks into pits shall not exceed twenty percent (20%) on a three (6) minute average.
  - (B) The opacity of fugitive particulate emissions from transfer from pits into front end loaders and from transfer from front end loaders into trucks shall comply with the fugitive particulate emission limits in 326 IAC(9).
- (5) The opacity of fugitive particulate emissions from continuous transfer of material onto and out of storage piles shall not exceed ten percent (10%) on a three (3) minute average.
- (6) The opacity of fugitive particulate emissions from storage piles shall not exceed ten percent (10%) on a six (6) minute average. These limitations may not apply during periods when application of fugitive particulate control measures is either ineffective or unreasonable due to sustained very high wind speeds. During such periods the company must continue to implement all reasonable fugitive particulate control measures and maintain records documenting the application of measures and the basis for a claim that meeting opacity limitation was not reasonable given prevailing wind conditions.
- (7) There shall be a zero (0) percent frequency of visible emission observations of a material during the in plant transportation of material by truck or rail at any time. Material transported by truck or rail that is enclosed and covered shall be considered in compliance with in-plant transportation requirement.
- (8) The opacity of fugitive particulate emissions from the in plant transportation of material by front end loaders and skip hoists shall not exceed ten percent (10%).
- (9) There shall be a zero (0) percent frequency of visible emission observations from a building enclosing all or part of the material processing equipment, except from a vent in the building.
- (10) The PM<sub>10</sub> emissions from building vents shall not exceed twenty-two thousandths (0.022) grains per dry standard cubic foot and ten percent (10%) opacity.
- (11) The opacity of particulate emissions from dust handling equipment shall not exceed ten percent (10%).
- (12) Any facility or operation not specified in 326 IAC 6.8-10-3 shall meet a twenty percent (20%), three (3) minute average opacity standard.
- (13) PM<sub>10</sub> emissions from each material processing stack shall not exceed 0.022 grains per dry standard cubic foot and ten percent (10%) opacity.